

Recombinant LSD1 / KDM1A protein

Catalog No: 31507, 31911**Expressed In:** *E. coli***Quantity:** 50, 1000 µg**Concentration:** 0.32 µg/µl**Source:** Human

Buffer Contents: Recombinant LSD1 / KDM1A protein expressed in *E. coli* cells supplied at a concentration of 0.32 µg/µl in 20 mM Na₂HPO₄/ NaH₂PO₄, pH 7.4, 300 mM NaCl, 16 mM glutathione, 1 mM EDTA, 0.05% Tween-20, and 20% glycerol.

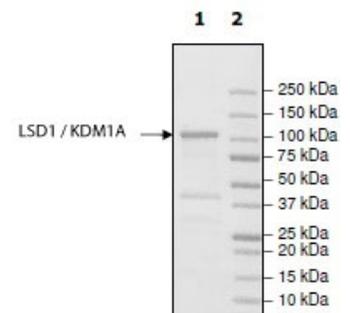
Background: **LSD1 (Lysine-specific demethylase 1, also designated KDM1A)** was identified as a subunit of different complexes (such as CTBP, CoREST, NuRD or BRAF35). **LSD1** is involved in transcriptional repression of genes through the demethylation of Histone H3 monomethyl Lys4 and Histone H3 dimethyl Lys4, a methylation site associated with transcriptional activation. **LSD1** is also involved in transcriptional activation through the demethylation of Histone H3 monomethyl Lys9 and Histone H3 dimethyl Lys9, a modification often associated with transcriptional repression. **LSD1** is also able to demethylate Lys370me1 and Lys370me2 in the regulatory domain of the tumor suppressor p53. **LSD1** is a flavin-dependent amine oxidase.

Protein Details: LSD1 (KDM1A, AOF2) is a histone demethylase that is specific to histone H3 dimethylated at lysine 4 (H3K4me2). Methylation of H3K4 is a marker of transcriptional activation. Recombinant full-length human LSD1 (GenBank Accession No. NM_015013), amino acids 158-end with N-terminal GST tag, was expressed in *E. coli*. The molecular weight of the protein is 103 kDa. The recombinant protein is >70% pure by SDS-PAGE.

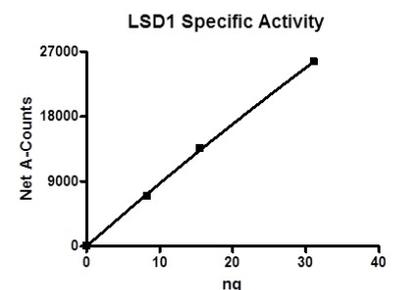
Application Notes: Recombinant LSD1 / KDM1A is suitable for use in histone demethylation assays. A recommended starting point for the demethylation assay is 20-100 ng of recombinant protein per reaction.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

**Recombinant LSD1 / KDM1A protein gel.**

LSD1 / KDM1A run on a 4-20% SDS-PAGE gel and stained with Coomassie blue.

**Recombinant LSD1 / KDM1A protein activity assay.**

Recombinant LSD1 / KDM1A activity measured using a fluorescent histone deacetylase assay.